## FUTURE FISHERIES IMPROVEMENT PROGRAM GRANT APPLICATION

(please fill in the highlighted areas)

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	A.	Applicant Name: Watershed Restoration Coalition of the Upper Clark Fork (WRC)					
	В.	Mailing Address: 1002 Hollenback Road					
	C.	City: Deer Lodge State: MT Zip: 59722					
		Telephone: 406-846-1703 x4					
	D.	Contact Person: Will McDowell, Project Coordinator					
		Address if different from Applicant: same					
		City: State: Zip:					
		Telephone: 406-396-7716 (Cell)					
	E.	Landowner and/or Lessee Name (if other than Applicant):  Floyd Balentine					
		Mailing Address: 899 Browns Gulch Rd					
		City: Butte State: MT Zip: 59701					
		Telephone: 723-2304					
		Landowner #2: Dale Malyevac, 499 Browns Gulch Rd., Butte, MT 59701 723-7656  Landowner #3: Don Ueland, Ueland Ranches Inc. 100 Cattle Dr., Butte, MT 59701 782-1123					
	PR	OJECT INFORMATION*					
	A.	Project Name: Lower Browns Gulch Fish Passage and Habitat Improvement					
		River, stream, or lake: Browns Gulch tributary to Silver Bow Creek					
		Location: Township 4N Range 8W Section 8, 29 Site #3 location: T3N R8W Sec 6,7					
		County: Silver Bow					
	B.	Purpose of Project:  Improve habitat connectivity for native fish by opening fish passage between Silver Bow Creek and					
		middle and upper Browns Gulch, and improving in-stream habitat in two critical reaches of lower-middle Browns Gulch.					

## C. Brief Project Description:

The project consists fish passage and habitat improvements on lower Browns Gulch to benefit westslope cutthroat trout and other sport fish. The fish passage activity consists of installing five Denil fish ladders on existing pin-and-plank type irrigation diversions in lower Browns Gulch, providing upstream passage to Hail Columbia Gulch and upper Browns Gulch. Aquatic and riparian habitat will be improved in three critical reaches where channels have been heavily modified by straightening and willow removal, resulting in eroding banks, headcuts, mobilization of large quantities of fine sediment, and degraded habitat conditions. These sites are all on private land.

Channel site #1 is a short reach adjacent to a newly relocated livestock corral (used for calving and lambing) just below Flume Gulch. Activities at this site include about 50 ft. of channel bank protection where the corral is threatened, and revegetation and removal of metal and rock debris from channel, and installation of a new winterized water tank to replace access to the creek.

Channel site #2 is relocation of a straightened channel for 1600 ft., in a small hayfield (not a commercial livestock operation). This activity would add 500 ft. of overall channel length, and reestablish the channel in its natural topographic position above the confluence with Hail Columbia.

Channel site #3 involves building 750 feet of soil of new stable channel in a straightened reach characterized by extreme bank and bed erosion in soft soils above Prevost Road. This activity is a "pilot project" to establish the feasibility of restoring the entire 3,200 ft. reach. The project would include fencing with 4-strand barbwire, and a new grazing regime.

Browns Gulch is the largest tributary of Silver Bow Creek, and is a Tier 1 fishery restoration priority for Montana FWP in the Upper Clark Fork. Recent fish tagging by Montana Fish Wildlife and Parks has documented that large fluvial westslope cutthroat trout, now present in Silver Bow Creek after decades of absence, are exploring the lower reaches of Browns Gulch. There is also a resident population of westslope cutthroat trout in middle and upper Browns Gulch, which is often separated from the lower Gulch by passage barriers, dewatering and poor habitat. Western pearlshell mussels also exist in middle and upper Browns Gulch, the only site in the upper Clark Fork they are confirmed. It is the intention of this project to support the reconnection of the new Silver Bow Creek native trout population to potential spawning areas in upper Browns Gulch, and improve habitat for native fish in critical reaches which are presently degrading both Browns Gulch and Silver Bow Creek with fine sediment.

This project is part of a larger partnership effort: the Watershed Restoration Coalition is working with Trout Unlimited, the Mile Hi Conservation District, Clark Fork Coalition, Butte Silver Bow government, NRCS and landowners to improve water quality and fish habitat in middle and lower Browns Gulch. Mile Hi CD contractors have identified key problems, quantified issues, and a new contractor is now completing the designs for stream channel habitat improvements for these project sites.

D. Length of stream of size of		Three miles: two on Ueland, one upstream
E. Project Budget:		
Grant Request (Dollars):	\$ <u>61,065</u>	
Contribution by Applicant (Dollars):	\$ 0	In-kind \$ <u>36,435</u>

Contribution from other Sources (Dollars):	\$ 62,300	In-kind \$ 0							
(attach verification - See page 2 budget template)									

Total Project Cost: \$ 159,800

F. Attach itemized (line item) budget – see template

(salaries of government employees are not considered as matching contributions)

- G. Attach specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete <a href="supplemental-questionnaire">supplemental-questionnaire</a> (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).
- H. Attach land management and maintenance plans that will ensure protection of the reclaimed area.

## III. PROJECT BENEFITS\*

A. What species of fish will benefit from this project?:

The project is intended to benefit pure westslope cutthroat trout. Fluvial cutthroat trout have recolonized Silver Bow Creek (from German Gulch) over the last two-three years. Some of these fish are exploring habitat in Browns Gulch. The primary objective of the project is to improve passage and habitat between Silver Bow Creek and the upper Browns Gulch sites which currently have adequate cutthroat spawning habitat (and is used by resident cutthroats). Brook trout are also present throughout the drainage.

B. How will the project protect or enhance wild fish habitat?:

The project will enhance wild fish habitat by helping native cutthroat trout now colonizing Silver Bow Creek to expand their habitat into lower and middle Browns Gulch, and re-establish a connection with higher quality habitats in upper Browns Gulch.

C. Will the project improve fish populations and/or fishing? To what extent?:

It is expected that the project will improve fish populations if fluvial cutthroats begin using Browns Gulch as a spawning tributary. It will also improve fish populations by improving substrate, shade, depth of pools and other habitat features in the habitat improvement reaches.

D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

The project will dramatically increase fishing opportunities if wild cutthroats begin to consistently use middle reaches of Browns Gulch as migratory and rearing habitat, because current salmonid fishing is limited to brook trout.

E. If the project requires maintenance, what is your time commitment to this project?:

The WRC is working with several partners on this project, including Clark Fork Coalition, and Trout Unlimited's Upper Clark Fork Project Coordinator. TU is taking a special interest in the fish ladders, and will make regular inspections of fish ladder function. WRC is working with landowners throughout Browns Gulch and is forming a Browns Gulch working group, meeting on the same day and place as the Mile Hi Conservation District, to track progress on implementation and eventually maintenance needs on the project components.

What was the cause of habitat degradation in the area of this project and how will the project correct the cause?:

Habitat degradation in Browns Gulch is a direct result of channel manipulation (straightening and incisement), historical removal of woody riparian vegetation, constriction of the stream corridor by irrigated hay fields, and over-saturated of banks by flood irrigation. The project is directly correcting the channel manipulation by bank stabilization, re-establishing stable plan and profile, revegetating with woody shrubs, and installing fencing and water gaps to widen the riparian corridor and reduce livestock impact.

G. What public benefits will be realized from this project?:

Public benefits will include: improvement of native fish populations on private and public land (the upper end of Browns Gulch is mostly US Forest Service), reduction of excess sediment supply to Browns Gulch and Silver Bow Creek, and improvement in water quality and fish habitat.

- H. Will the project interfere with water or property rights of adjacent landowners? (explain):

  No water rights will be negatively affected. New headgates will improve efficacy of water use (reduce excess use by increasing convenience and control).
- I. Will the project result in the development of commercial recreational use on the site?: (explain):

No

J. Is this project associated with the reclamation of past mining activity?:

No mining activity is directly related to the project, but there are indirect benefits to the remediated and restored Silver Bow Creek, by improving habitat connectivity.

Each approved project sponsor must enter into a written agreement with the Department specifying terms and duration of the project.

## IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature:	Date:	
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Sponsor (if applicable):		

Mail To: Montana Fish, Wildlife & Parks

**Habitat Protection Bureau** 

PO Box 200701

Helena, MT 59620-0701

Incomplete or late applications will be returned to applicant.

<sup>\*</sup>Highlighted boxes will automatically expand.